Running Title: USING SOCIAL NORMS TO REDUCE RAPE PROCLIVITY

Using social norms to reduce men's rape proclivity: Perceived rape myth acceptance of out-groups may be more influential than that of in-groups

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Abstract

Feedback about a reference group's rape myth acceptance (RMA) has been shown to affect men's rape proclivity (Bohner, Siebler, & Schmelcher, 2006, *Personality and Social Psychology Bulletin*). In 2 experiments with male university students (total N = 294), this research was extended by varying the in-group vs. out-group status of the reference group. Results showed that feedback about other men's RMA influenced self-reported RMA (Experiment 1) and rape proclivity (Experiments 1 and 2). Overall, participants' rape proclivity was affected by feedback about both in-groups' RMA and out-groups' RMA. The strongest reduction of rape proclivity was produced by low-RMA feedback about an out-group that participants expected to be high in RMA (Experiment 2). Implications for theory and intervention are discussed.

(119 words)

Keywords: rape myths; rape proclivity; sexual aggression; sexual violence; social norms

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The negative effects of sexual violence against women on the lives of the victims cannot be overemphasized. It is therefore important to examine the factors that may lower men's proclivity to commit rape. To date, research studies have identified many causes of male sexual violence against women (for reviews, see Buss & Malamuth, 1996; Malamuth, 1998). In this paper, we address one particular determinant of men's rape proclivity (RP), the perceived social norms surrounding the concept of violence against women, as expressed in the rape myths held by other people. The concept of rape myths (Burt, 1980; Schwendinger & Schwendinger, 1974) refers to widespread beliefs that are thought to sustain male sexual violence. Rape myths have been defined, according to their function, as beliefs about rape that serve to deny, trivialize, or justify sexual aggression of men against women (for reviews, see Bohner, 1998; Bohner, Eyssel, Pina, Siebler, & Viki, 2009; Lonsway & Fitzgerald, 1994). Although their content may vary widely, common rape myths tend to blame the victim (e.g., "Women often provoke rape through their appearance or behavior"), exonerate the perpetrator (e.g., "Men often can't control their sexual urges"), and deny the violence inherent in rape (e.g., "Women often make up rape accusations as a way of getting back at men").

Rape myths may thus be seen as a special case of the "belief in a just world" (Lerner, 1980) applied to the area of sexual violence (see Bohner, 1998). They also bear similarities to the more general concept of "techniques of neutralization" (Sykes & Matza, 1957), which has been proposed as an explanation for criminal behavior (for an application of the latter to sexual violence, see Bohner et al., 1998). In the following sections, we first address the impact of men's own RMA on their RP; then we turn to the

main focus of the current paper, the question of how social norms, i.e. the perceived RMA of others, can be used to influence men's RP.

Rape Myth Acceptance, Rape Proclivity, and Aggressive Behavior

Researchers have proposed that rape myths may facilitate sexual aggression, acting as "psychological neutralizers" which allow potential rapists to turn off social prohibitions against hurting others (e.g., Burt, 1980). Some quasi-experimental studies bearing on this assumption have shown that rapists reported higher levels of rape myth acceptance (RMA) than did non-rapists (e.g., Feild, 1978; Koralewski & Conger, 1992), although other studies have failed to reveal such differences (cf. Epps, Haworth, Swaffer, 1993; Overholser & Beck, 1986). Correlational studies using samples of nonconvicted males provide a clearer pattern. They generally revealed a strong relationship between self-reported rape proclivity and RMA (e.g., Malamuth, 1981, 1989; Malamuth & Check, 1985; Quackenbush, 1989; Tieger, 1981).

Although these results were compatible with the idea that rape myths affect the likelihood of raping, it long remained unclear whether they reflect a causal impact of RMA on RP. To test the causal pathway more directly, Bohner et al. (1998) were the first to use an experimental approach. Adopting a paradigm proposed by Schwarz and Strack (1981), Bohner and his colleagues manipulated the relative cognitive accessibility of RMA and RP by varying the order in which respondents answered questionnaires assessing these constructs. If variations in RMA cause variations in RP, they reasoned, then a stronger link between these two variables would be observed if respondents had recently thought about their rape myth beliefs when reporting their RP. The results of two studies clearly supported this assumption, showing that the RMA-RP correlation was significantly higher when RMA had been assessed before RP than vice versa. This pattern was replicated by Bohner, Jarvis, Eyssel, and Siebler (2005).

Finally, measures of RP are empirically related to measures of naturalistic sexual aggression. Scenario-based measures of RP like the ones used in the present research showed medium-sized positive correlations with men's self-reports of previous acts of sexual coercion (Bohner et al., 2005; Eyssel, Bohner, Süssenbach, & Schreiber, 2009) and moderate to high correlations with men's self-predictions of engaging in sexual coercion in the future (Eyssel et al., 2009; for related findings, see Malamuth, 1981, 1989).

Evidence for the Effects of Rape Myth Acceptance as a Social Norm

More recent research has addressed the possibility that men's RP may be influenced not only by their own individual endorsement of rape myths, but also by the perceived RMA of others acting as a *social norm* (Bohner et al., 2006; Eyssel, Bohner, & Siebler, 2006). Social norms have been defined as "rules and standards that are understood by members of a group, and that guide and/or constrain behavior" (Cialdini & Trost, 1998, p. 152). Norms are conceptualized as predictors of behavior in several theoretical approaches (e.g., Ajzen, 1991; Pepitone, 1976; for a review, see Cialdini & Trost, 1998). We may distinguish between *injunctive norms*, which prescribe or prohibit certain behaviors, and *descriptive norms*, which contain information about how other people judge or act in a particular situation (Cialdini, Kallgren, & Reno, 1991; Schaffer, 1983). Bohner and his colleagues' research focused on rape myths functioning as descriptive norms, representing information about relevant others' RMA. It should be noted, however, that rape myths contain prescriptive elements as well (e.g., by specifying conditions under which sexual aggression is justifiable).

Regarding the conditions that facilitate normative influence, previous theorists have emphasized *norm salience* (Cialdini et al., 1991) and *in-group status of the reference group* that the norm emanates from (Terry & Hogg, 1996). Bohner et al. (2006)

therefore presented highly salient in-group norms to maximize the likelihood of demonstrating normative influences on RP. In two experiments they provided students with low or high feedback about other students' alleged responses to a rape myth questionnaire. Later, they assessed self-reports of RP related to several acquaintance-rape scenarios. The results of both studies showed that RP was higher for students who had received high norm feedback than for students who had received low norm feedback. To study the roles of participants' own RMA both as a mediator of the norm effect and as an independent predictor of RP, Bohner et al. (2006) used two different designs: In their first experiment, participants reported their own RMA *after the norm feedback but before reporting their RP*, so it could be shown that the effect of norm feedback on RP was mediated by self-reported RMA. In their second experiment, participants reported their own RMA *before the norm feedback*, so it could be shown that both the norm feedback and participants' pre-treatment level of RMA jointly contributed to the prediction of RP (for a replication, see Eyssel et al., 2006). In our present research, we will follow the same logic, first studying RMA as a mediator of norm influences on RP (Experiment 1), and then assessing RMA as an independent predictor of RP (Experiment 2).

The laboratory findings by Bohner et al. (2006; Eyssel et al., 2006) complement survey work conducted by Berkowitz and his colleagues. Berkowitz (2002) proposed that men who believe that their peers are using coercion to obtain sex are more likely to show similar behavior themselves. Indeed, students tended to underestimate their peers' attitudes regarding the importance of consent in sexual activities, so the correction of such misperceptions could be an important resource in the prevention of sexual violence (Fabiano, Perkins, Berkowitz, Linkenbach, & Stark, 2003). The role of peer-group norms is further emphasized in longitudinal research by Loh, Gidycz, Lobo, and Luthra (2005), which indicates that the level of RMA among U.S. fraternity members may influence

rape perpetration.

The Present Research: Varying In-group Versus Out-group Status of the Reference Group

The experimental and applied research we discussed suggests that norm salience and in-group status of the reference group are jointly sufficient conditions for observing normative influences on men's RP (Bohner et al., 2006; Eyssel et al., 2006). However, both our theoretical understanding of normative influences on behavior and our knowledge about optimal intervention strategies may be enriched by considering additional hypotheses about the relative effectiveness of *in-groups versus out-groups* as referents of social norms.

Drawing upon self-categorization theory (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987), Terry and Hogg (1996) proposed a model of normative influence that stressed the importance of in-group norms. Their main prediction is that group norms will affect behavior only if they derive from an in-group that is a relevant source of social identity for the perceiver (see also Turner, 1991). Several studies supported this view by showing that effects of group norms on behavior were strong when people identified with the reference group (Terry & Hogg, 1996; Terry, Hogg, & White, 1999), when people's group membership (vs. unique individuality) had been made salient (Wellen, Hogg, & Terry, 1998), or when people's collective self was chronically accessible (Trafimow & Finlay, 1996). According to the self-categorization model, we should expect a stronger effect of others' RMA on mens' RP if those others are perceived as an in-group rather than as an out-group.

However, the consideration of additional motivational and cognitive factors suggests a more important role for out-group norms under specifiable conditions. For example, within a social identity framework, it seems plausible that people use normative

information about out-groups to establish or regain positive distinctiveness of their in-group by increasing the differentiation between groups (Jetten & Spears, 2003). If distinctiveness is threatened by an out-group that is perceived to be similar to the in-group, people may be motivated to adjust their in-group perception in order to increase the difference between the two groups. However, a recent meta-analysis has shown that threats to intergroup distinctiveness do not inevitably lead to greater differentiation in judgment or behavior – such effects are most likely for people who identify highly with their in-group, and are stronger for behavioral than for judgmental measures of differentiation (Jetten, Spears, & Postmes, 2004).

A more cognitive explanation suggests that an out-group's attitude may serve as a relevant source of information, and hence affect behavioral inclinations, especially if clear expectancies exist regarding the out-group's attitude. The basis for this assumption comes from work on the attribution process. According to Green, Lightfoot, Bandy, and Buchanan (1985), for example, a target's behaviors that confirm a salient group-schema are likely to elicit internal attributions, whereas behaviors that violate expectancies derived from a salient group-schema are likely to elicit external attributions. Normative influence should be stronger in the latter case: If the perceiver cannot explain the behavior with expected characteristics of the actors, then the behavior is likely to be perceived as reflecting external reality (see also Kelley, 1973) and hence as being relevant for the perceiver.

Based on these theoretical considerations, we predict that feedback about others' RMA may affect an individual's RP to the extent that this feedback diverges from the individual's stereotypic expectancies about the reference group. For example, a perceiver may initially expect that a particular out-group strongly endorses rape myths, but may later learn that this out-group actually rejects rape myths. This experience might lower

the perceiver's RP to a greater extent than his learning about the out-group's rejection of rape myths would have done in the absence of opposing prior expectancies. This tendency of being more influenced by unexpected out-group norms may be particularly strong if the perceived out-group norm also poses a threat to positive in-group distinctiveness.

In order to examine the role of out-group norm feedback in influencing men's RP, we conducted two studies. In both studies, we varied the in-group versus out-group status of the reference group whose rape myth responses were presented to participants, taking into account expectancies about the reference group. To maximize the likelihood of demonstrating the potential of *lowering* RP by feedback about out-group norms, we used out-groups that participants would expect to hold *higher* RMA than their in-group. Thus, with the aim of demonstrating the utility of out-group feedback as an intervention strategy, we deliberately confounded the degree of expectancy violation and the direction of the influence. We will get back to this issue in the General Discussion.

As in previous research, we used university student samples in both studies. This choice of sample is suitable for two reasons: (1) As we present norm feedback from in-groups versus out-groups, it is necessary that participants belong to a circumscribed group (a general population sample would be of little use in this regard); (2) students are a relevant group regarding the issue of RP, as the international literature shows that nonconsensual sexual interactions are widespread among young adults, and pose a problem on college campuses (e.g., Abbey & McAuslan, 2004; Koss, Gidycz, & Wisniewski, 1987; Krahé, 2009).

Experiment 1

Our first study focused on a set of conditions for which the expectancy-violation and positive distinctiveness explanations make predictions that differ from those of the

self-categorization model. This is most clearly the case if norm feedback violates out-group related expectancies more strongly than it violates in-group related expectancies. Under such circumstances the expectancy-violation and positive-distinctiveness explanations predict a larger effect of norm feedback for the out-group than for the in-group condition, whereas the self-categorization model predicts the opposite. To meet these criteria, Experiment 1 focused on low norm feedback in combination with an out-group that participants expected to be high in RMA, such that the feedback would be more unexpected in the out-group condition than in the in-group condition. Three conditions were run: a no-feedback condition, a low-norm in-group condition, and a low-norm out-group condition. The design followed Bohner et al. (2006, Expt. 1): Feedback about others' RMA was provided at the outset, later participants reported their own RMA and, subsequently, their RP. Thus, both RMA and RP could be used as dependent variables, and a potential mediation of the effect of norm feedback on RP via RMA could be assessed. To keep the assessment of RMA separate from the norm feedback manipulation (cf. Bohner et al., 2006), we presented the norm feedback in the form of a text paragraph.

We tested the following hypotheses:

(1) Overall, participants' self-reported RMA is lower in the low-norm conditions than in the no-feedback condition.

(2) Overall, participants' self-reported RP is lower in the low-norm conditions than in the no-feedback condition.

In addition, two competing hypotheses were derived from the theoretical approaches we discussed above:

(3a) Based on self-categorization theory, participants' self-reported RMA and RP are lower in the low-norm *in-group* condition than in the low-norm *out-group* condition.

(3b) Based on the expectancy-violation and positive distinctiveness accounts, participants' self-reported RMA and RP are lower in the low-norm *out-group* condition than in the low-norm *in-group* condition.

Method

The experiment was conducted at the University of Kent at Canterbury (United Kingdom), which has a high percentage of international students. We therefore decided to recruit students with British nationality as participants, presenting "British students" as the in-group and one group of foreign students as the out-group. Our design demanded that participants expect the out-group to be higher in RMA than their in-group. A pilot study showed that this was the case for the out-group "Greek students".

Pilot Study on Expectancies

Specifically, 40 British male students were asked to rate the rape-related attitudes of either male Greek students or male British students; assignment to one of these target groups was random. We used four items that read: "Greek [British] male students hold ...positive attitudes towards rape victims / ...negative attitudes towards rape perpetrators / ...negative attitudes towards rape victims / ...positive attitudes towards rape perpetrators." Each item was followed by a scale from 1 (*strongly disagree*) to 7 (*strongly agree*).

Results indicated that pilot participants expected Greek students to hold attitudes toward rape victims that are more negative (M = 2.95) and less positive (M = 4.05) than those of British students (M = 1.75 and 6.05, resp.). They also expected Greek students' to hold attitudes toward rape perpetrators that are less negative (M = 5.10) and more positive (M = 2.40) than those of British students (M = 6.60 and 1.25, resp.). Each item-based comparison between target groups was highly significant, all $t(38) > 3.58$, $p < .001$. Thus, participants expected the British student in-group to hold strong pro-victim and anti-perpetrator attitudes, whereas they expected the Greek student out-group to hold

less pronounced anti-perpetrator attitudes and only moderately pro-victim attitudes. From this we inferred that feedback about a low level of RMA would violate expectancies more strongly for the Greek student out-group than for the British student in-group.

Main Study: Participants and Design

Ninety male students at the University of Kent at Canterbury (United Kingdom) were asked to complete a questionnaire on male-female relationships. All participants were of British nationality; their mean age was 23.0 years. Participants were randomly assigned to one of three conditions of a single-factor design (*norm feedback: none vs. low-norm in-group vs. low-norm out-group*), with the constraint of equal *n* per condition.

Overview of Procedure

The participants were asked to complete a booklet containing (1) a page with questions on sex, age, and nationality; (2) a page containing the norm feedback manipulation (this page was omitted in the no feedback condition); (3) a scale measuring RMA; and (4) a scenario measure of RP. After completing the questionnaire, participants were probed for suspicion and thoroughly debriefed, with particular emphasis on the fictitious nature of the norm feedback. None of the participants reported any suspicion.

Materials

Feedback manipulation. Students in the two low-norm conditions were asked to read carefully a paragraph summarizing the results of a study which, depending on condition, had allegedly been conducted with either Greek or British university students. This paragraph was constructed by paraphrasing the content of items taken from Costin's (1985) RMA scale in such a way that it conveyed low acceptance of rape myths by the reference group. The “Greek” [“British”] version of the paragraph read as follows:

> “Over the last two years there have been a number of studies conducted on Greek [British] male university students regarding their attitudes towards rape. A recent study ... found that the majority of Greek [British] male students believed that sexual violence is

> no longer acceptable in society. More specifically, they believe that rape is usually committed against the woman's will and that it is not provoked by a woman's appearance or behaviour. They see women as victims of sexist attitudes that exist in our societies, and feel that no woman is responsible for her rape but is the innocent victim of such an act. ... The study also found a general belief that in forcible rape the victim never causes the crime. The majority of Greek [British] male students also hold the view that the victim's sexual history should at all times be held confidential and never submitted as evidence in a court case."

To ensure that participants had paid attention to the paragraph, they were asked to answer the same four items as were used in the pilot study to rate Greek (or British) students' overall attitudes toward rape victims and perpetrators. We chose not to ask participants about their expectancies before the experimental manipulation in order to avoid any demand effects. To assess whether an expectancy violation was present, we relied on the comparison between pilot data and data from the main experiment regarding perceptions of the reference group's attitudes.

Rape myth acceptance scale. Participants answered the short form of the Illinois Rape Myth Acceptance Scale (IRMA-SF; Payne, Lonsway, & Fitzgerald, 1999), which consists of 17 critical items (example: "Rape accusations are often used as a way of getting back at men") and three fillers. The mean across the 17 critical items was defined as a participant's RMA score (Cronbach's alpha = .91).

Rape proclivity measure. Participants completed an English version of the RP measure consisting of five acquaintance-rape scenarios that had been used by Bohner et al. (1998, 2006). For example, one scenario read:

> "You have gone out a few times with a woman you met recently. One weekend you go to a film together and then back to your place. You have a few beers, listen to music and do a bit of petting. At a certain point your friend realises she has had too much to drink to be able to drive home. You say she can stay over with you, no problem. You are keen to grab this opportunity and sleep with her. She objects, saying

you are rushing her and anyway she is too drunk. You don't let that put you off, you lie down on her and just do it."

Participants were instructed to imagine that they were in the situation described, before answering three questions that followed each scenario. An initial filler question asked how sexually aroused they would be in this situation. Then followed two questions designed to assess RP, which asked whether they would have behaved like this (scale from 1, *certainly no*, to 5, *certainly yes*), and how much they would have enjoyed "getting their way" in this situation (scale from 1, *not at all*, to 5, *very much*). The latter two questions for each of the five scenarios were combined to yield a 10-item index of RP (Cronbach's alpha = .85).

Results

Preliminary Analyses

Ratings of reference group's attitudes. Participants in the low-norm conditions generally agreed with the statements that the reference group held positive attitudes toward rape victims (M = 5.65) and negative attitudes toward perpetrators (M = 5.60), but generally disagreed with the statements that the reference group held positive attitudes toward perpetrators (M = 1.97) and negative attitudes toward victims (M = 2.15). Importantly, no differences emerged between the Greek and British reference groups, $t <$ 1 for all tests. The difference in attitudes ascribed to the two reference groups that had been found in the pilot test was not apparent any more after the feedback manipulation. The pattern of means was thus consistent with our aim of producing an expectancy violation in the direction of lower perceived RMA particularly for the Greek reference group.

Descriptive statistics of RMA and RP. The overall mean of RMA was 2.62, its standard deviation was 0.99. The overall mean of RP was 1.83, its standard deviation was

0.68. The two measures were positively correlated as expected, $r(88) = .68$.

Test of Hypotheses

Effects of norm feedback on self-reported RMA. The means of self-reported RMA were 3.32 for the no-feedback condition, 2.48 for the low-norm in-group condition, and 2.05 for the low-norm out-group condition. Contrast analyses ($MSE = 0.72$) showed that, supporting Hypothesis 1, the two low-norm conditions taken together produced a lower level of RMA compared to the no-feedback condition, $t(87) = 5.57$, $p < .001$; furthermore, supporting Hypothesis 3b, low norm feedback about the Greek out-group produced lower RMA than did low norm feedback about the British in-group, $t(87) = 1.99$, $p < .05$. The RMA pattern thus was in line with the expectancy-violation and positive distinctiveness models of normative influence, but was at odds with the self-categorization model, which would predict an opposite difference between out-group and in-group conditions.

Effects of norm feedback and RMA on rape proclivity. The means of the RP index were 2.25 for the no-feedback condition, 1.62 for the low-norm in-group condition, and 1.63 for the low-norm out-group condition. This pattern was similar to that obtained for RMA in that the two low-norm conditions combined produced lower RP compared to the no-feedback condition, $t(87) = 4.47$, $p < .001$ ($MSE = 0.39$), supporting Hypothesis 2. However, the low-norm in-group and low-norm out-group conditions were almost identical in self-reported RP, $t(87) = -0.08$, $p = .934$. This pattern supports neither the self-categorization model (Hypothesis 3a) nor the expectancy-violation / positive distinctiveness models (Hypothesis 3b). It does support the more general assumption, however, that salient norms affect behavioral intentions (Cialdini et al., 1991), independent of the reference group they emerge from (see Bohner et al., 2006).

Mediation analysis. To explore if the effect of low norm feedback on RP was

mediated via RMA (as had been the case in Bohner et al., 2006, Expt. 1), we conducted a series of regression analyses. In the first analysis, we used RMA as the dependent variable and entered two orthogonal, contrast-coded predictor variables, the first (CON1) representing the difference between the combined low-norm conditions (each coded as -1) and the no-feedback condition (coded as +2), the second (CON2) representing the difference between the low-norm in-group (coded as -1) and the low-norm out-group condition (coded as +1), with the no feedback condition coded as 0. This analysis (which is mathematically identical to the contrast analyses on RMA described above) yielded significant beta coefficients for each contrast. In a second, hierarchical analysis, we used RP as the dependent variable and entered the two contrast-coded predictors as above in a first block, then entered RMA as a continuous predictor in a second block. This analysis showed a significant effect of only CON1 on RP in the first block, and a significant effect of RMA on RP in the second block. In addition, the significant effect of CON1 on RP was significantly reduced once RMA was included as a concurrent predictor, $z = 4.39$, $p < .001$, Sobel test (Preacher & Leonardelli, 2003). The complete mediation results including all beta coefficients are displayed in Figure 1.

Discussion

The results of our first study once again showed that normative information about others' RMA affects individuals' RP. The mediational path from feedback about others' RMA via own RMA to RP, which had been obtained in previous work (Bohner et al., 2006), was fully replicated. More importantly, Experiment 1 provided initial data bearing on the alternative models of normative influence we were examining. Its results were more in line with an expectancy violation / positive distinctiveness framework than with the stronger impact of in-group norms that self-categorization theory would have predicted. The effect of feedback about others' low RMA on self-reported RMA was

significantly larger when this feedback referred to an out-group that was stereotypically expected to exhibit high RMA than when it referred to an in-group that was expected to exhibit low RMA. These findings are more compatible with the idea that expectancy violation, rather than identification with the reference group, boosts normative influences. A motivational explanation based on intergroup differentiation would also apply, as British students might have reported lower RMA in the Greeks condition than in the British condition in order to regain positive intergroup distinctiveness.

With respect to self-reported RP, the data were less conclusive. None of the alternative models we discussed received unequivocal support. For behavioral intentions, it simply did not seem to matter if normative information came from an out-group or an in-group; the mere presence of a salient social norm was sufficient to affect behavioral judgments.

A potential limitation of Experiment 1 was that it featured only a *low level of normative feedback.* Although this level of feedback, combined with expectancies of high RMA in the out-group, was most diagnostic regarding a decision between explanatory frameworks, we felt it would be desirable to conduct a study in which the level of feedback would be varied and crossed orthogonally with in-group versus out-group status of the reference group. This was done in Experiment 2. A number of additional changes and extensions were also carried out. First, we set out to examine if variations of in-group versus out-group status of the reference group would affect RP if RMA was assessed independently at the outset, as had been done in previous research (Bohner et al., 2006, Expt. 2). Thus, RMA could not be used as a mediator in our second experiment, but instead could serve as an independent predictor of RP alongside the norm feedback. Second, we used a different out-group than in Experiment 1, to see if results would generalize across out-groups. Third, we pilot-tested not only expectancies regarding the

in-group's versus out-group's rape-related beliefs, but also the degree of identification with and liking for the in-group versus out-group.

Experiment 2

This study provided an extension of the design used by Bohner et al. (2006, Expt. 2; see also Eyssel et al., 2006), with in-group versus out-group status of the norm reference group as an additional independent variable. Feedback about others' RMA was varied at two levels (low vs. high), crossed with two levels of reference group (in-group vs. out-group); furthermore, a control condition without RMA feedback was included. In a pilot study, we set out to identify two groups that student participants would clearly perceive as in-group and out-group, respectively. At the same time, we wished to keep the two groups as similar as possible regarding their evaluation, such that any differences observed between in-group and out-group norms would not be due to differences in participants' attitude toward those groups. Finally, as in Experiment 1, we wanted to ensure that the reference groups would differ with respect to participants' expectations about their RMA; again, the out-group would be expected to show higher endorsement of rape myths than the in-group. This was also ensured by pilot testing.

Based on theoretical considerations and our previous findings, we tested the following hypotheses:

(4) Overall, participants' self-reported RP is positively correlated with their RMA.

(5) Overall, participants' self-reported RP is higher in the high-norm conditions than in the low-norm conditions.

Additional competing hypotheses were again derived from the two theoretical approaches we discussed earlier:

(6a) Based on self-categorization theory, the effect of norm feedback on RP, as stated in Hypothesis 5, is significantly larger if the reference group is an in-group rather than

an out-group.

(6b) Based on the expectancy-violation model, participants' self-reported RP is generally lower in the *out-group* conditions than in the *in-group* conditions.

The last hypothesis rests on the assumption that the lowest RP should be reported by participants who are exposed to *low out-group* norms, and the highest RP should be reported by participants who are exposed to *high in-group* norms, as these are the conditions where RMA feedback would be most discrepant from expectancies. The other two feedback conditions, i.e. high out-group norms and low in-group norms, being more consistent with expectancies, should produce less extreme self-reported RP scores falling in between the other two condition means. In statistical terms, Hypothesis 6a predicts an interaction effect of reference group by level of feedback, whereas Hypothesis 6b predicts separate main effects of reference group and level of feedback, but no interaction of the two variables (Note 1). Figure 2 illustrates these hypothesized result patterns. Finally, it should be noted that the positive distinctiveness model shares the expectancy violation model's predictions for the low-norm conditions, but does not allow unequivocal predictions for the high-norm conditions. Therefore, no hypothesis covering the whole design was derived from the positive distinctiveness model.

Method

Pilot Work on Reference Groups

Identification and liking. In a first pilot study, 76 male students at the University of Bielefeld received a list of 16 group labels, including both groups that we expected participants to identify with (e.g., "students", "male students at Bielefeld", "18-28 year olds") and groups we did not expect them to identify with (e.g., "pensioners", "the homeless"). For each group, participants rated (a) how much they identified with each group (2 items: "I feel that I belong to [group label]"; "I feel similar to [group label]"),

and (b) how much they liked each group (2 items: “I find [group label] pleasant”; “I find [group label] attractive as a group”). Responses were given on a scale from 1, *not at all*, to 11, *very much*. For each group, we later computed an *identification score* by averaging across the first two ratings, and a *liking score* by averaging across the latter two ratings. Our aim was to identify pairs of groups that differed on the identification index, but not on the liking index. This was most clearly the case for “male students at Bielefeld” and “pensioners”. Specifically, whereas participants identified more strongly with “male students at Bielefeld” (M = 7.23) than with “pensioners” (M = 1.62), $t(74) = 13.49$, $p < .001$, they liked both groups equally well ($M_{Students}$ = 5.63; $M_{Pensioners}$ = 5.12), $t(74) = 1.20$, $p = .233$. Hence we adopted “male students at Bielefeld” to operationalize in-group norms, and “pensioners” to operationalize out-group norms.

Expectancies regarding the reference groups’ RMA. In a second pilot test, 29 students at the University of Bielefeld were randomly assigned to one of two *target group* conditions: *pensioners vs. male students at Bielefeld*. Participants received a questionnaire containing the 17 critical items of the German adaptation (Kley, Gerger, Siebler, & Bohner, 2002) of the short form of the IRMA-SF scale (Payne et al., 1999). They were asked to rate for each item how they thought most pensioners (or most male students at Bielefeld, resp.) would reply. These ratings were averaged across the 17 items and then compared between the target group conditions (Cronbach's alpha was .90 for pensioners, and .86 for male students). The results clearly indicated that partipants from the population of our main study expected the out-group of pensioners to be higher in RMA (M = 3.80; SD = 1.17) than the in-group of male students at Bielefeld (M = 2.76; SD = 0.77), $t(27) = 2.85$, $p = .008$.

Main Study: Participants and Design

Two hundred and four male students at the University of Bielefeld (Germany)

(mean age 23.7 years), representing a variety of majors, volunteered for a study on “the relationship between men and women”, which would be run on personal computers. Each student was paid 4 Euros for taking part. Participants were randomly assigned to the conditions of a 2 (*norm feedback: low vs. high*) by 2 (*source of norms: in-group vs. out-group*) factorial design or a *control condition without norm feedback.*

Procedure and Materials

Participants learned that a computer program would present questions on the relationship between men and women, as well as questions pertaining to other topics. As in Bohner et al. (2006, Expt. 2), they further learned that they might receive information about previous participants’ responses to some of the questions presented (“because participants are often interested in seeing the results of studies”). The selection of questions and information to be presented was said to be determined by the computer on a random basis. To support the impression of random selection, a frame containing the words “module change” was displayed for several seconds between the parts of the computerized questionnaire. In actuality, participants received all modules in the constant order detailed below.

Rape myth acceptance. Participants first completed the German IRMA-SF scale (Kley et al., 2002; Payne et al., 1999). In addition to the 17 critical RMA items, seven neutral filler items were included. Participants responded on a scale from 1, *do not agree at all*, to 7, *completely agree*. The mean across the 17 critical items was defined as a participant's IRMA score, with higher scores indicating greater RMA (Cronbach’s alpha = .85).

Information about a neutral topic and norm feedback. Next, participants encountered a module containing the alleged responses of local citizens to five questions regarding community issues (e.g., parking in the city center). This was done to

familiarize participants with the format used to inform them about others' alleged responses and to uphold the cover story of randomized module changes. Then, all participants except those in the control condition received information about the alleged responses of previous participants to the rape myth scale (see below for detail).

Rape proclivity. Participants' RP was assessed using the five acquaintance-rape scenarios that had been used in Experiment 1. Only the response format was changed to a seven-point scale, i.e. for each scenario, participants indicated whether they would have behaved like this (1, *certainly no*, to 7, *certainly yes*), and how much they would have enjoyed getting their way (1, *not at all*, to 7, *very much*). These two questions were averaged across the five scenarios to form a 10-item index of RP (Cronbach's alpha = .83).

Additional measures. A concluding module contained questions concerning participants' age, major, and sexual orientation, as well as an open-ended suspicion probe. After completion of these measures, participants were thoroughly debriefed with particular emphasis on the fictitious nature of the norm feedback.

Source and Level of RMA Norms

All participants, except those in the control condition, received information about the alleged responses of previous participants to each of the 17 critical IRMA items and the seven fillers. Specifically, each item was redisplayed in the center of the screen, and both the norm information and a reminder of a participant's own response were displayed below.

Reference group and level of RMA norms. To manipulate the in-group versus out-group status of the reference group, the norm information read either "On average, male students at Bielefeld responded: [value 1]", or "On average, pensioners responded: [value 1]". This was always followed by the statement: "Your own answer was: [value

2]". "Value 2" was the participant's own answer given a few minutes earlier, and "value 1", depending on condition, was one standard deviation lower or two standard deviations higher than the participant's own answer, rounded to one decimal place. Standard deviations were taken from IRMA item distributions in a previous study with 100 participants. If the resulting value would have been less than 1 or greater than 7, the values 1.0 and 7.0, respectively, were displayed instead. The mean of feedback values across the 17 critical IRMA items was 1.6 and 4.3 for the low and high feedback conditions, respectively. A comparison of these values with the expectancies assessed in the second pilot study for pensioners (3.80) and students (2.76) shows that expectancy violation was greater for the "low-feedback / pensioners" and "high-feedback / students" conditions than for the "low-feedback / students" and "high-feedback / pensioners" conditions.

Feedback for filler items. Because all 17 critical IRMA items are positively cued, it might appear implausible to participants that their own responses should differ from others' responses consistently in the same direction. To eliminate this possible source of suspicion, the feedback values for the filler items were determined by the computer program in such a way that they differed from a participant's own score in the opposite direction. Across the full set of rape myth and filler items, a participant thus always encountered both greater and lesser agreement by others than by himself.

Results

Preliminary Analyses

Exclusion of cases. The data of 15 participants (7.4 %) were excluded from analyses: Because the rape scenarios may not provide realistic behavioral templates for homosexual individuals, the data of nine participants who had indicated a homosexual orientation were excluded; in addition, six participants had either suspected the purpose

of the study, doubted the veracity of the norm feedback, or reported not to have taken the study seriously. The final sample thus consisted of 189 participants. Exclusion of cases was independent of experimental condition, χ^2 (4, N = 204) = 3.38, p = .50.

Descriptive statistics of RMA and RP. The overall mean of RMA was 2.21, its standard deviation was 0.71. The overall mean of RP was 1.67, its standard deviation was 0.77. The two measures were again positively correlated, r(187) = .53.

Test of Hypotheses

To test our hypotheses, we subjected the RP index to an analysis of covariance that included the five conditions of the experimental design coded as a single independent variable, and the RMA score as a continuous covariate. Within this setup, the covariate-adjusted main effects and interactions of the factors *level of norm feedback* (low vs. high) and *reference group* (students vs. pensioners), as well as comparisons of each of the experimental conditions with the control condition were tested as a-priori contrasts (Note 2). Figure 3 shows the covariate-adjusted means of the RP index for the five experimental conditions.

The analysis revealed significant main effects of the covariate and each of the experimental factors: In line with Hypothesis 4 and previous studies, participants' own RMA was a significant predictor of RP, r = .53, F(1, 183) = 75.44, p < .001. Furthermore, in line with Hypothesis 5, participants who received high norm feedback reported significantly higher RP than did participants who received low norm feedback, F(1, 183) = 5.30, p = .022. Also, in line with Hypothesis 6b, participants reported lower RP when they had learned about pensioners' RMA rather than students' RMA, F(1, 183) = 4.09, p = .045.

Hypothesis 6a contained the prediction that in-group vs. out-group status of the reference group would moderate the size of the norm feedback effect. This hypothesis

was not supported, as the interaction effect of level of feedback and reference group was far from significant, $F(1, 183) = 0.21$, $p = .648$.

As expected, the control condition mean of RP fell in between the two in-group conditions (see Note 1). However, pairwise comparisons of experimental condition means with the control condition mean revealed only one significant effect: Participants who had received low norm feedback about pensioners reported lower RP than did participants who had not received any feedback, $F(1, 183) = 7.39$, $p = .007$. For all other comparisons, $p > .11$.

In sum, participants' RP was clearly influenced in the expected direction by the experimental norm feedback. Contrary to the self-categorization approach, this effect was not qualified by the reference group from which the norm information emerged. Instead, a main effect of reference group was observed, with participants reporting lower RP in the out-group than in the in-group conditions. Interestingly, only low RMA feedback about *the out-group* led to significantly lower RP compared to the control condition. These results are in line with the expectancy-violation and positive distinctiveness models of normative influence.

Discussion

Our second experiment provided yet another demonstration that the perceived RMA of others causally affects men’s RP, replicating findings from Experiment 1 and previous research (Bohner et al., 2006; Eyssel et al., 2006). Over and above the correlation between participants’ own RMA and their RP, high RMA norms led to higher RP than did low RMA norms. Importantly, this was true for both in-group and out-group norms to about the same extent. Furthermore, our results showed that the lowest RP was reported by participants who had been exposed to low *out-group* norms (and indeed these were the only group to show lower RP than the no-feedback controls), whereas the

highest RP, at least on a descriptive level, was reported by participants who had been exposed to high *in-group* norms (see Figure 3). These were the conditions in which the violation of expectancies regarding the reference group should have been greatest, according to pilot testing. Because participants expected pensioners to endorse rape myth beliefs more than students, the low norm feedback should have appeared more extreme to them in the pensioner than in the student condition; conversely, the high feedback should have appeared more extreme in the student than in the pensioner condition. These differences in perceived expectancy-violation led participants to be more influenced towards lower RP by low-RMA information about pensioners, and to be more influenced towards higher RP by high-RMA information about students (although RP in this condition was not significantly higher than in the control condition). Our results thus replicate and extend the findings from Experiment 1 by showing that expectancy violation effects may be obtained for both high and low norm feedback, and may indeed affect behavioral inclinations rather than just attitudes.

The finding that, in relation to the control condition, expectancy violation caused by a high-RMA in-group seemed to have a weaker effect than expectancy violation caused by a low-RMA out-group may be problematic for an account that is based purely on expectancy violation, and may point to the contribution of a positive distinctiveness motive, as we further discuss below. From an applied point of view, however, one major purpose of this research was finding ways of *reducing* RP, rather than increasing it. The lack of a significant contrast between the high-norm in-group condition and the control condition is thus less troublesome.

General Discussion

The current set of studies further corroborates the role of rape myths as a factor facilitating sexual aggression. Our studies extend previous correlational (e.g., Malamuth,

1981) as well as experimental studies on the relationship between RMA and RP (Bohner et al., 1998, 2006; Eyssel et al., 2006). They demonstrate that salient information about both in-groups' and out-groups' RMA may cause differences in men's self-reported proclivity to exert sexual violence. The first of the present studies provides additional evidence on how this normative influence is mediated: It showed that the perceived RMA of others may increase or lower men's RP by temporarily increasing or lowering their own RMA, thus replicating and extending Bohner et al. (2006, Expt.1). Our studies thus once again confirm that RMA functions as a social norm (Burt, 1980).

Comparing Theoretical Frameworks

The theoretical frameworks we pitted against each other in the present research, self-categorization theory (Terry and Hogg, 1996; Terry et al., 1999), a striving for positive intergroup distinctiveness (Jetten & Spears, 2003), and the expectancy-violation approach (Green et al., 1985), may provide insights that allow for a refinement of predictions about normative influences on sexually aggressive behavior. To start with the expectancy-violation account: Whereas norm salience may be a sufficient condition for normative influences on behavior to occur, the relative strength of normative influence may additionally depend on the degree to which salient norms violate perceivers' expectancies about the reference group. Our second study clearly showed that salient norms were most effective in affecting behavioral inclinations when they diverged from initial expectancies. Its results further suggested that expectancy-violation rather than in-group versus out-group status of the reference group per se determined behavioral outcomes.

However, the observed asymmetry of differences from the control condition between the high-norm in-group and low-norm out-group conditions may point to an additional influence of a positive distinctiveness motive. If one assumes that an out-group

that clearly rejects rape myths poses a greater distinctiveness threat than an out-group that clearly endorses rape myths, then a distinctiveness motive would be activated only in the low-norm out-group (but not high-norm out-group) condition, and its joint operation with the informational effect of unexpected feedback might explain the observed asymmetry.

To further disentangle expectancy violation from the striving for positive distinctiveness, it would be desirable to conduct an extended replication of Experiment 2, using different out-group conditions that vary prior expectancies about the out-group's endorsement of rape myths relative to the in-group. For such a design, only the expectancy-violation model (but not the positive distinctiveness model) would predict that the direction of the in-group vs. out-group main effect we observed should reverse for out-groups that perceivers expect to *reject* (rather than endorse) rape myths.

Why did in-group vs. out-group status of the reference group per se not moderate the impact of normative information on behavioral intention in our studies, whereas it had been shown to do so in other contexts (e.g., Terry & Hogg, 1996)? One tentative answer to that question is that the extent to which in-group norms exert a stronger influence on behavior than do out-group norms may depend on additional factors such as (a) prior knowledge and expectancies about available in-groups and out-groups as well as (b) the salience of normative information about in-groups and out-groups. We discuss each aspect in turn.

Prior Knowledge About In-groups and Out-groups

If, as in our studies, perceivers hold clear-cut expectancies about the relative standing of both the in-group and the out-group on the relevant attitude dimension, both types of norm may be equally informative. Thus, people may indeed generally be motivated to align their own attitudes and related behaviors with their in-group, but they

may do so by using available out-group related information along with expectancies about the relative standing of both in-group and out-group on the attitude dimension, as discussed above.

The case should be different, however, if perceivers are lacking clear expectancies regarding the attitudes of a given reference group. Then this group's informational value, and hence its potential to influence behavior, should be diminished. It is plausible to assume that, in natural settings, people are generally more likely to hold clear expectancies about their in-group's attitudes than about many out-groups' attitudes. In such circumstances, in-group norms would indeed affect behavioral intentions more strongly than out-group norms, in line with predictions from social categorization theory.

Norm Salience

The focus theory of normative conduct (Cialdini et al., 1991) emphasizes the importance of norm salience. Salience of norms may indeed be a sufficient condition for effects of group norms on behavior to occur. Taking this as a starting point, both previous research on the influence of RMA norms (Bohner et al., 2006; Eyssel et al., 2006) and our present studies have always provided the normative feedback in a highly salient fashion. We believe that this experimental paradigm was very useful in generating initial evidence for the normative effects of rape myths on sexual aggression tendencies. It might also be high in ecological validity regarding dating situations, where the salience of RMA norms might be increased by situational cues (see Abrams, Viki, Masser, & Bohner, 2003; Bohner et al., 1998).

We do acknowledge, however, that normative information may sometimes be more difficult to extract from natural social environments. The social comparison literature shows that, in order to assess the appropriateness of evaluative beliefs, people often seek for similar others as a comparison standard (for reviews, see Goethals &

Darley, 1977; Suls, Martin, & Wheeler, 2002). In addition, as discussed above, information about in-group members' beliefs may generally be more available than information about out-group members' beliefs. Each of these factors would imply a greater ecological importance of in-group norms than of out-group norms. On the other hand, research on social comparisons has also shown that when it comes to validating beliefs that pertain to verifiable facts, *dissimilar* others may provide a more diagnostic source of information (Goethals & Darley, 1977, 1986; Suls et al., 2002). Applied to our current research question, this suggests that the choice of comparison standard may depend on whether the acceptance of rape myths is perceived as a matter of subjective preference or as a belief in objectively verifiable facts.

Furthermore, out-groups are usually perceived to be more homogeneous than in-groups (e.g., Park & Judd, 1990) and may thus provide more distinctive normative information. This would suggest a preference for out-groups as the standards of spontaneous social comparison in real-life settings. To address the ideas discussed in this section empirically, one would need to use a paradigm in which normative information has to be actively sought for by perceivers, rather than provided in a highly salient fashion by the experimenter. For the time being, our current studies show that in settings where normative information is readily available, expectancy violation and a striving for positive distinctiveness, rather than in-group or out-group status per se, may be more relevant for explaining normative impact on behavior.

Potential for Application

Insights from our studies could be used to inform interventions designed to reduce RMA and, ultimately, help to prevent rape. Existing sex offender treatment programs aim at correcting distorted beliefs about rape and sexual violence (e.g. Marshall, 1999; Seto & Barbaree, 1999). Educational programs directed at student

populations in many U.S. and Canadian colleges also target sexual violence beliefs (e.g. Fonow, Richardson & Wemmerus, 1992; Lonsway & Kothari, 2000; O' Donohue et al., 2003; for a review see Bohner et al., 2009). The aforementioned research specifies that interventions that can successfully bring about change in individual attitudes should use meaningful messages of personal relevance to their target group (Foubert, 2000; Foubert & Marriott, 1997; Foubert & McEwen, 1998).

If learning discrepant, low-RMA information about out-groups who were expected to hold high RMA leads to a reduction in perceivers' own RMA (Expt. 1) and RP (Expt. 2), a similar effect might be brought about by using individual members of such out-groups as sources of persuasive communications. If a member of an out-group with presumably high RMA turns out to argue strongly against rape myths, the overall effect of this communication on recipients' attitudes may be stronger than with other types of sources, especially compared to sources who may initially be seen as low in RMA (see attributional accounts of persuasion: e.g., Eagly, Chaiken, & Wood, 1981). It would provide the additional advantage that it should usually be possible to find individual members of stereotyped out-groups who are willing to promote counter-stereotypic positions, whereas ethical considerations would preclude telling the targets of an anti-rape intervention that the out-group as a whole rejects rape myths (unless this can in fact be verified). Working with out-group sources might thus complement existing intervention programs that rely on peer-group normative influence (e.g., Berkowitz, 2002).

Sex offenders may be particularly likely to show the belief pattern described by Berkowitz (2002), believing that their peer group is high in RMA. For this target group, therefore, an in-group based intervention may be called for. But identified sex offenders are only a small and potentially extreme subgroup of sexually aggressive men, i.e. they

are the ones whose crimes were serious or frequent enough to be prosecuted and punished. Research on the "justice gap" in sexual violence shows, however, that an increasing majority of rapists are neither prosecuted nor punished (Temkin & Krahe, 2008). So general prevention in non-offender populations is in dire need. These considerations show that future studies varying expectancies for both in-groups and out-groups would be particularly valuable.

Notes

[1] Hypotheses 5 and 6 refer to effects within the 2 x 2 design made up by the factors reference group and level of norm feedback, but do not include the control condition, where neither a reference group nor a level of feedback was specified. Based on previous research, we may predict that the control condition mean of RP should fall somewhere in between the high and low in-group norm conditions, whereas a clear-cut prediction in relation to the high and low out-group norm conditions cannot be made, because the relative size of the interaction effect specified in Hypothesis 6a and of the reference group main effect specified in Hypothesis 6b, respectively, in comparison to the main effect of level of norm feedback could not be anticipated.

[2] This analysis was done by using the KMATRIX subcommand in SPSS 14.0 module UNIANOVA.

References

Abbey, A., & McAuslan, P. (2004). A longitudinal examination of male college students' perpetration of sexual assault. *Journal of Consulting and Clinical Psychology, 72*, 747-756.

Abrams, D., Viki, G. T. N., Masser, B., & Bohner, G. (2003). Perceptions of stranger and acquaintance rape: The role of benevolent and hostile sexism in victim blame and rape proclivity. *Journal of Personality and Social Psychology, 84*, 111-125.

Ajzen, I. (1991). The theory of planned behaviour. *Organizational Behavior and Human Decision Processes, 50*, 179-211.

Berkowitz, A. D. (2002). Fostering men's responsibility for preventing sexual assault. In P. A. Schewe (Ed.), *Preventing violence in relationships* (pp. 163–196), Washington, DC: American Psychological Association.

Bohner, G. (1998). *Vergewaltigungsmythen: Sozialpsychologische Untersuchungen über täterentlastende und opferfeindliche Überzeugungen im Bereich sexueller Gewalt* [Rape myths: Social psychological studies on beliefs that exonerate the assailant and blame the victim of sexual violence]. Landau, Germany: Verlag Empirische Pädagogik.

Bohner, G., Eyssel, F., Pina, A., Siebler, F., & Viki, G. T. (2009). Rape myth acceptance: Cognitive, affective, and behavioural effects of beliefs that blame the victim and exonerate the perpetrator. In M. A. H. Horvath & J. M. Brown (Eds.), *Rape: Challenging contemporary thinking* (pp. 17-45). Cullompton, UK: Willan.

Bohner, G., Jarvis, C. I., Eyssel, F., & Siebler, F. (2005). The causal impact of rape myth acceptance on men's rape proclivity: Comparing sexually coercive and noncoercive men. *European Journal of Social Psychology, 35*, 819-828.

Bohner, G., Reinhard, M.-A., Rutz, S., Sturm, S., Kerschbaum, B. & Effler, D.

(1998). Rape myths as neutralizing cognitions: Evidence for a causal impact of anti-victim attitudes on men's self-reported likelihood of raping. *European Journal of Social Psychology, 28*, 257-268.

Bohner, G., Siebler, F., & Schmelcher, J. (2006). Social norms and the likelihood of raping: Perceived rape myth acceptance of others affects men's rape proclivity. *Personality and Social Psychology Bulletin*, *32*, 286-297.

Burt, M. R. (1980). Cultural myths and supports of rape. *Journal of Personality and Social Psychology, 38*, 217-230.

Buss, D. M., & Malamuth, N. (Eds.) (1996). Sex, power, conflict: Evolutionary and feminist perspectives. Oxford, UK: Oxford University Press.

Cialdini, R. B., Kallgren, C. A., & Reno, R. R. (1991). A focus theory of normative conduct. *Advances in Experimental Social Psychology, 24*, 201-234.

Cialdini, R. B., & Trost, M. R. (1998). Social influence: Social norms, conformity, and compliance. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *Handbook of social psychology* (4th ed., Vol. 2, pp. 151-192). Boston, MA: McGraw-Hill.

Costin, F. (1985). Beliefs about rape and women's social roles. *Archives of Sexual Behavior, 14*, 319-325.

Eagly, A. H., Chaiken, S., & Wood, W. (1981). An attribution analysis of persuasion. In J. H. Harvey, W. Ickes, & R. F. Kidd (Eds.), *New directions in attribution research* (Vol. 3, pp. 37-62). Hillsdale, NJ: Erlbaum.

Epps, K. J., Haworth, R., & Swaffer, T. (1993). Attitudes toward women and rape among male adolescents convicted of sexual versus nonsexual crimes. *The Journal of Psychology, 127*, 501-506.

Eyssel, F., Bohner, G., & Siebler, F. (2006). Perceived rape myth acceptance of

others predicts rape proclivity: Social norm or judgmental anchoring? *Swiss Journal of Psychology, 65,* 93-99.

Eyssel, F., Bohner, G., Süssenbach, P., & Schreiber, P. (2009). Neuentwicklung und Validierung eines szenariobasierten Verfahrens zur Erfassung der Neigung zu sexueller Aggression [New development and validation of a scenario-based measure of sexual aggression proclivity]. *Diagnostica, 55,* 117-127.

Fabiano, P. M., Perkins, H. W., Berkowitz, A., Linkenbach, J., & Stark, C. (2003). Engaging men as social justice allies in ending violence against women: Evidence for a social norms approach. *Journal of American College Health, 52,* 105–111.

Feild, H. S. (1978). Attitudes toward rape: A comparative analysis of police, rapists, crisis counselors, and citizens. *Journal of Personality and Social Psychology, 36,* 166-179.

Fonow, M. M., Richardson, L., & Wemmerus, V. A. (1992). Feminist rape education: Does it work? *Gender and Society, 6,* 108-121.

Foubert, J. D. (2000). The longitudinal effects of a rape prevention program on fraternity men's attitudes, behavioral intent, and behavior. *Journal of American College Health, 48,* 158-163.

Foubert, J. D., & Marriott, K. A. (1997). Effects of a sexual assault peer education program on men's belief in rape myths. *Sex Roles, 36 (3/4),* 259-268.

Foubert, J. D., & McEwen, M. K. (1998). An all-male rape prevention peer education program: decreasing fraternity men's behavioral intent to rape. *Journal of College Student Development, 39(6),* 548-556.

Gerger, H., Kley, H., Bohner, G., & Siebler, F. (2007). The Acceptance of Modern Myths About Sexual Aggression (AMMSA) Scale: Development and validation

in German and English. *Aggressive Behavior, 33*, 422-440.

Goethals, G. R., & Darley, J. M. (1977). Social comparison theory: An attributional approach. In J. M. Suls & R. M. Miller (Eds.), *Social comparison processes* (pp. 259-278). Washington, DC: Hemisphere.

Goethals, G. R., & Darley, J. M. (1986). Social comparison theory: Self-evaluation and group life. In B. Mullen & G. R. Goethals (Eds.), *Theories of group behavior* (pp. 21-47). New York: Springer.

Green, S. K., Lightfoot, M. A., Bandy, C., & Buchanan, D. R. (1985). A general model of the attribution process. *Basic and Applied Social Psychology, 6*, 159-179.

Jetten, J., & Spears, R. (2003). The divisive potential of differences and similarities: The role of intergroup distinctiveness in intergroup differentiation. *European Review of Social Psychology, 14*, 203-241.

Jetten, J., Spears, R., & Postmes, T. (2004). Intergroup distinctiveness and differentiation: A meta-analytic integration. *Journal of Personality and Social Psychology, 86*, 862-879.

Kelley, H. H. (1973). The processes of causal attribution. *American Psychologist, 28*, 107-128.

Kley, H., Gerger, H., Siebler, F., & Bohner, G. (2002, September). *Deutsche Fassung der Illinois Rape Myth Acceptance Scale* [Geman adaptation of the Illinois Rape Myth Acceptance Scale]. Poster presented at the 43rd "Kongress der Deutschen Gesellschaft für Psychologie", Berlin, Germany, September 22-26, 2002.

Koralewski, M. A., & Conger, J. C. (1992). The assessment of social skills among sexually coercive college males. *The Journal of Sex Research, 29*, 169-188.

Koss, M. P., Gidycz, C. A., & Wisniewski, N. (1987). The scope of rape: Incidence and prevalence of sexual aggression and victimization in a national sample of

higher-education students. *Journal of Consulting and Clinical Psychology, 55,* 162-170.

Krahé, B. (2009). Sexuelle Aggression und Opfererfahrung unter Jugendlichen und jungen Erwachsenen Prävalenz und Prädiktoren [Sexual aggression and victimization among adolescents and young adults: Prevalence and predictors]. *Psychologische Rundschau, 60,* 173-183.

Lerner, M. J. (1980). *The belief in a just world: A fundamental delusion.* New York: Plenum Press.

Loh, C., Gidycz, C. A., Lobo, T. R., & Luthra, R. (2005). A prospective analysis of sexual assault perpetration: Risk factors related to perpetrator characteristics. *Journal of Interpersonal Violence, 20,* 1325-1348.

Lonsway, K. A., & Fitzgerald, L. F. (1994). Rape myths: In review. *Psychology of Women Quarterly, 18,* 133-164.

Lonsway, K. A., & Kothari, C. (2000). First year campus acquaintance rape education: Evaluating the impact of a mandatory intervention. *Psychology of Women Quarterly, 24,* 220-232.

Malamuth, N. M. (1981). Rape proclivity among males. *Journal of Social Issues, 37 (4),* 138-157.

Malamuth, N. M. (1989). The attraction to sexual aggression scale: Part two. *The Journal of Sex Research, 26,* 324-354.

Malamuth, N. M. (1998). An evolutionary-based model integrating research on the characteristics of sexually coercive men. In J. G. Adair, D. Bélanger & K. L. Dion (Eds.), *Advances in psychological science.Vol. 1: Social, personal, and cultural aspects* (pp. 151-184). Philadelphia, PA: Psychology Press.

Malamuth, N. M., & Check, J. V. P. (1985). The effects of aggressive pornography on beliefs in rape myths: Individual differences. *Journal of Research in*

Personality, 19, 299-320.

Marshall, W. L. (1999). Current status of North American assessment and treatment programs for sexual offenders. *Journal of Interpersonal Violence, 14,* 221-239.

O'Donohue, W., Yeater, E. A., & Fanetti, M. (2003). Rape prevention with college males: the roles of rape myth acceptance, victim empathy, and outcome expectancies. *Journal of Interpersonal Violence, 18,* 513-531.

Overholser, J. C., & Beck, S. (1986). Multimethod assessment of rapists, child molesters, and three control groups on behavioral and psychological measures. *Journal of Consulting and Clinical Psychology*, *54*, 682-687.

Park, B., & Judd, C. M. (1990). Measures and models of perceived group variability. *Journal of Personality and Social Psychology*, *59*, 173-191.

Payne, D. L., Lonsway, K. A., & Fitzgerald, L. F. (1999). Rape myth acceptance: Exploration of its structure and its measurement using the Illinois Rape Myth Acceptance Scale. *Journal of Research in Personality*, *33*, 27-68.

Pepitone, A. (1976). Toward a normative and comparative biocultural social psychology. *Journal of Personality and Social Psychology*, *34*, 641-653.

Preacher, K. J., & Leonardelli, G. J. (2003). *Calculation for the Sobel test: An interactive calculation tool for mediation tests*. [On-line: http://people.ku.edu/~preacher/sobel/sobel.htm].

Quackenbush, R. L. (1989). A comparison of androgynous, masculine sex-typed, and undifferentiated males on dimensions of attitudes toward rape. *Journal of Research in Personality*, *23*, 318-342.

Schaffer, L. S. (1983). Toward Pepitone's vision of a normative social psychology: What is a social norm? *Journal of Mind and Behavior*, *4*, 275-294.

Schwarz, N., & Strack, F. (1981). Manipulating salience: Causal assessment in

natural settings. *Personality and Social Psychology Bulletin, 6,* 554-558.

Schwendinger, J. R., & Schwendinger, H. (1974). Rape myths: In legal, theoretical, and everyday practice. *Crime and Social Justice, 1,* 18-26.

Seto, M. C., & Barbaree, H. E. (1999). Psychopathy, treatment behavior, and sex offender recidivism. *Journal of Interpersonal Violence, 14,* 1235-1248.

Suls, J., Martin, R., & Wheeler, L. (2002). Social comparison: Why, with whom, and with what effect. *Current Directions in Psychological Science, 11,* 159-163.

Sykes, G. M., & Matza, D. (1957). Techniques of neutralization: A theory of delinquency. *American Sociological Review, 22,* 664-670.

Temkin, J., & Krahé, B. (2008). *Sexual assault and the justice gap: A question of attitude.* Oxford, UK: Hart.

Terry, D. J., & Hogg, M. A. (1996). Group norms and the attitude-behavior relationship: A role for group identification. *Personality and Social Psychology Bulletin, 22,* 776-793.

Terry, D. J., Hogg, M. A., & White, K. M. (1999). The theory of planned behaviour: Self-identity, social identity and group norms. *British Journal of Social Psychology, 38,* 225-244.

Tieger, T. (1981). Self-rated likelihood of raping and the social perception of rape. *Journal of Research in Personality, 15,* 147-158.

Trafimow, D., & Finlay, K. A. (1996). The importance of subjective norms for a minority of people: Between-subjects and within-subjects analyses. *Personality and Social Psychology Bulletin, 22,* 820-828.

Turner, J. C. (1991). *Social influence.* Buckingham, UK: Open University Press.

Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987). *Rediscovering the social group: A self-categorization theory.* Oxford, UK:

Blackwell.

Wellen, J. M., Hogg, M. A., & Terry, D. J. (1998). Group norms and attitude-behavior consistency: The role of group salience and mood. *Group Dynamics: Theory, Research, and Practice, 2*, 48-56.

Figure Captions

Figure 1. Mediation model showing rape proclivity as a function of two contrast-coded norm feedback variables (CON1: low-norm out-group and low-norm in-group combined [each coded -1] versus no norm feedback [coded +2]; CON2: low-norm in-group [coded -1] versus low-norm out-group [coded +1], with no feedback coded 0) and rape myth acceptance (Experiment 1). Numbers shown are beta coefficients. The coefficients in parentheses reflect the path from norm feedback variables to rape proclivity when rape myth acceptance is included in the regression model. *** $p < .001$; * $p < .05$.

Figure 2. Hypothetical patterns of means for rape proclivity as a function of high vs. low norm feedback referring to in-group vs. out-group, as predicted by the self-categorization model of normative influence (left panel) and by an expectancy-violation account (right panel).

Figure 3. Observed effect pattern of high vs. low norm feedback referring to in-group vs. out-group on rape proclivity (condition means, adjusted for the covariate rape myth acceptance) (Experiment 2).

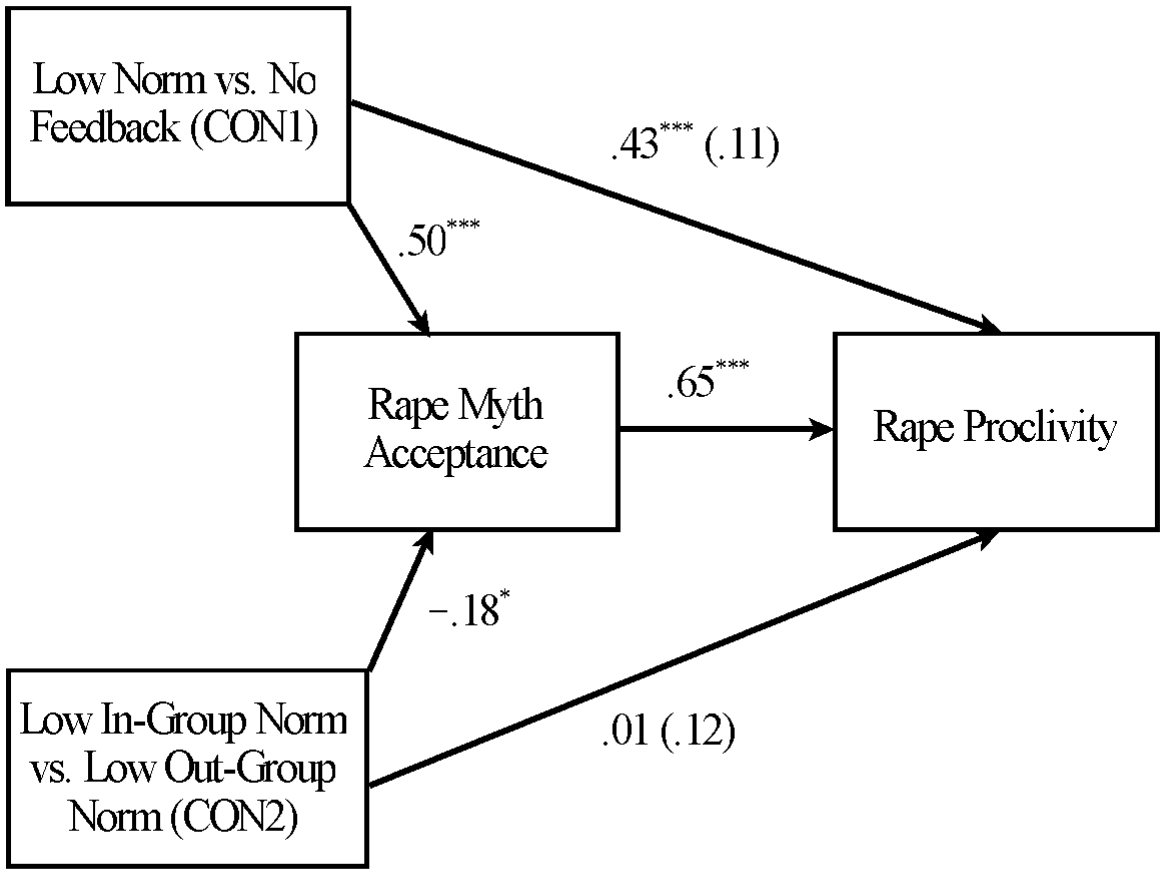
Low Norm vs. No Feedback (CON1)
.43*** (.11)
.50***
Rape Myth Acceptance
.65***
Rape Proclivity
−.18*
Low In-Group Norm vs. Low Out-Group Norm (CON2)
.01 (.12)

Figure 1

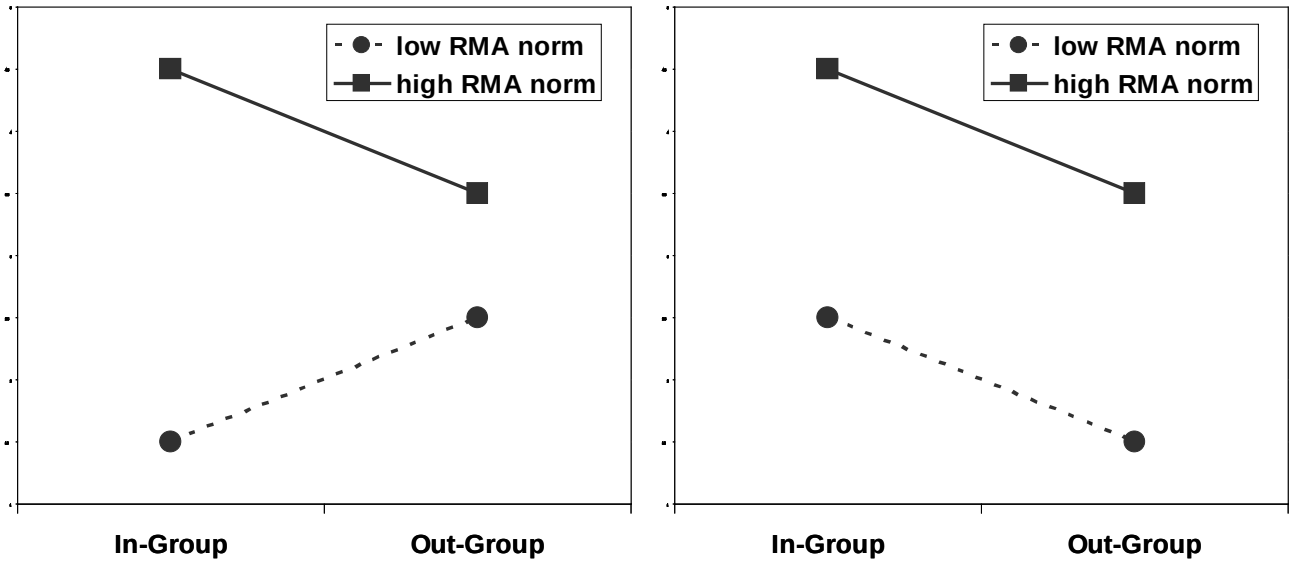
low RMA norm
high RMA norm
In-Group
Out-Group
low RMA norm
high RMA norm
In-Group
Out-Group

Figure 2

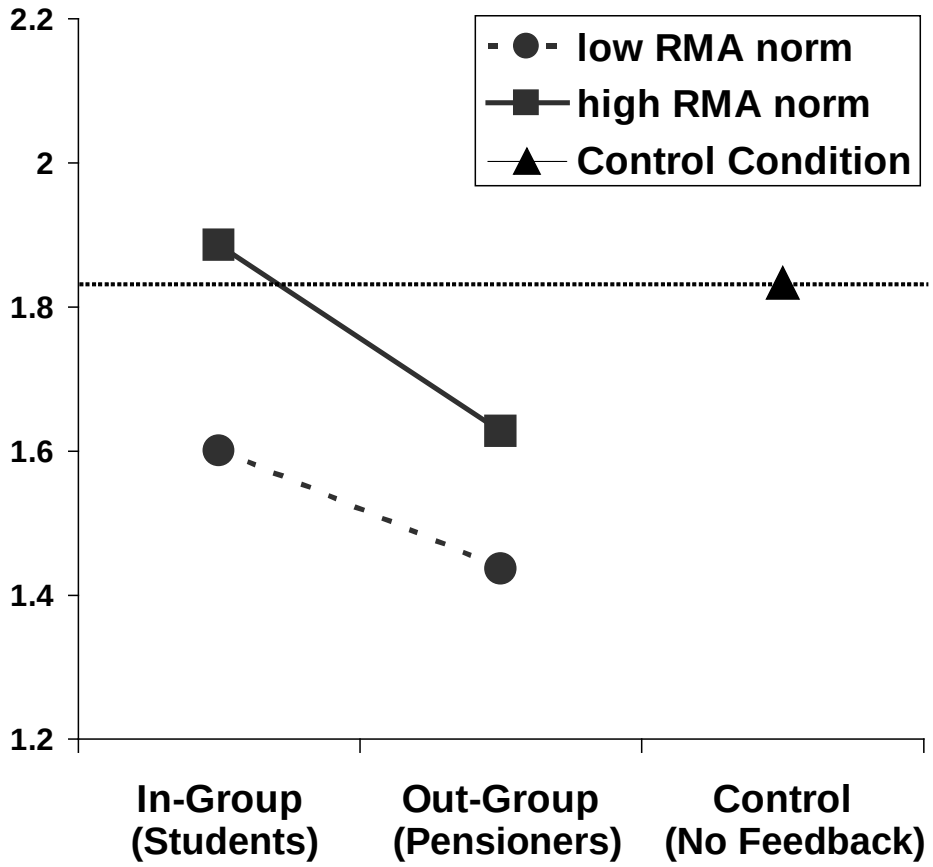
2.2
2
1.8
1.6
1.4
1.2
low RMA norm
high RMA norm
Control Condition
In-Group (Students)
Out-Group (Pensioners)
Control (No Feedback)

Figure 3